

## WHAT IS CLAIMED IS:

## 1. A data processing configuration, comprising:

- 5           a data processing system;
- a network communication device of the data processing system enabling the system to communicate with a network, wherein the communication device provides a port suitable for receiving a network cable connector;
- 10           a first wireless bridge device having a connector suitable for insertion in the port, wherein the wireless bridge device is configured to encrypt information received from the system according to a predetermined encryption algorithm and to transmit the information wirelessly; and
- 15           a second wireless bridge device having a connector suitable for insertion into a network port, wherein the second wireless bridge device is configured to receive information wirelessly and to decrypt received information according to a decryption algorithm that is matched to the encryption algorithm of the first bridge device wherein the first and
- 20           second wireless bridge devices communicate wirelessly with each other exclusively.
2. The configuration of claim 1, wherein the first wireless bridge device is configured to format the encrypted information according to a wireless protocol prior to transmitting it and wherein the second wireless bridge device is configured to unformat the wireless protocol prior to
- 25           decrypting it.
3. The configuration of claim 2, wherein the wireless protocol is selected from an IEEE 802.11 protocol and a Bluetooth protocol.
- 30           4. The configuration of claim 2, wherein the first wireless bridge device further includes means for receiving and decrypting information transmitted by the second wireless bridge and wherein

the bridge includes means for encrypting network packets and transmitting the encrypted packets.

5 5. The configuration of claim 1, wherein the encryption algorithm is based on an encryption key common to and embedded in the first and second wireless bridge devices.

6. The configuration of claim 5, wherein the encryption key is at least 128 bits and unique to the first and second wireless bridge devices.

10 7. The configuration of claim 1, wherein the first and second wireless bridge device connectors are RJ-45 compliant connectors and wherein the network communication device comprises an Ethernet compliant network interface card of the data processing device.

15 8. A wireless bridge suitable for use in a data processing network, comprising:  
a first wireless bridge device configured to receive network packets from a network device, encrypt the packets according to an encryption algorithm, and transmit the encrypted packets wirelessly;  
20 a second wireless bridge device configured to receive encrypted network packets from the wireless bridge device and decrypt the packets according to a decryption algorithm wherein the encryption and decryption algorithms of the first and second wireless bridge devices are unique and matched to each other wherein the first is capable of communicating information exclusively to the second device exclusively and the second  
25 devices is capable of decoding information from the first device exclusively.

9. The wireless bridge of claim 8, wherein the first device is configured to connect to a network interface card (NIC) of a data processing system.

30 10. The wireless bridge of claim 9, wherein the first wireless bridge device includes an RJ-45 connector suitable for connecting to an Ethernet compliant NIC.

11. The wireless bridge of claim 10, wherein the second wireless bridge device is configured to connected to an RJ-45 port of a wired local area network.

5 12. The wireless bridge of claim 8, wherein the first wireless bridge device is configured to format the encrypted information according to a wireless protocol prior to transmitting it and wherein the second wireless bridge device is configured to unformat the wireless protocol prior to decrypting it.

10 13. The wireless bridge of claim 12, wherein the wireless protocol is selected from an IEEE 802.11 protocol and a Bluetooth protocol.

14. The wireless bridge of claim 12, wherein the first wireless bridge device further includes means for receiving and decrypting information transmitted by the second wireless bridge and  
15 wherein the bridge includes means for encrypting network packets and transmitting the encrypted packets.

15. A method of enabling wireless connection between a data processing device and a local area network, comprising:

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providing a first wireless bridge device configured to receive network packets from a network device, encrypt the packets according to an encryption algorithm, and transmit the encrypted packets wirelessly; and

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providing a second wireless bridge device configured to receive encrypted network packets from the wireless bridge device and decrypt the packets according to a decryption algorithm wherein the encryption and decryption algorithms of the first and second wireless bridge devices are unique and matched to each other wherein the first wireless bridge device is capable of communicating information exclusively to the second device  
30 exclusively and the second devices is capable of decoding information from the first device exclusively.

16. The method of claim 15, wherein providing the first and second wireless bridge devices is further characterized as providing a first bridge device configured to format the encrypted information according to a wireless protocol prior to transmitting it and providing a second  
5 wireless bridge device configured to unformat the wireless protocol prior to decrypting it.

17. The method of claim 16, wherein the wireless protocol is selected from an IEEE 802.11 protocol and a Bluetooth protocol.

10 18. The method of claim 16, wherein the first wireless bridge device further includes means for receiving and decrypting information transmitted by the second wireless bridge and wherein the bridge includes means for encrypting network packets and transmitting the encrypted packets.

15 19. The method of claim 15, wherein the encryption algorithm is based on an encryption key common to and embedded in the first and second wireless bridge devices.

20. The method of claim 19, wherein the encryption key is unique to the first and second wireless bridge devices.